Web: www.taiclone.com
Tel: +886-2-2735-9682
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K02288

Catalog No: tcsc3395

Available Sizes

Size: 10mg

Size: 50mg

Specifications

CAS No:
1431985-92-0

Formula:
$C_{20}H_{20}N_2O_4$

Pathway:
Protein Tyrosine Kinase/RTK;TGF-beta/Smad

Target:
ALK;TGF-β Receptor

Purity / Grade:
>98%

Solubility:
DMSO : ≥ 58.6 mg/mL (166.30 mM)

Observed Molecular Weight:
352.38

Product Description

K02288 is a potent inhibitor of **ALK**, and inhibits ALK1/2/3/6 with **IC_{50}**s of 1.8/1.1/34.4/6.3 nM; K02288 is less potent against ALK4/5, with IC_{50}s of 302 nM and 321 nM.

IC50 & Target: IC50□1.8 nM (ALK1), 1.1 nM (ALK2), 34.4 nM (ALK3), 6.3 nM (ALK6), 302 nM (ALK4), 321 nM (ALK5)[1]

In Vitro: K02288 reduces a robust phosphorylation of Smad1/5/8 induced by BMP4 stimulation, with an apparent IC_{50} of 100 nM.

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K02288 causes near complete inhibition of Smad2 phosphorylation at 0.5 μM[1]. K02288 binds to ALK1 in an ATP-mimetic fashion with two hydrogen bonds to the kinase hinge. K02288 also inhibits BMP9-ALK1 signalling, and induces a hypersprouting phenotype in HUVECs[2].

In Vivo: K02288 (1 μM) induces dysfunctional angiogenesis in a chick embryo CAM model[2].